

No 61

In 333 Market St.

Inaugural Essay

on

Passed March 2<sup>d</sup>

1828

Illustration of the Microscope

For the Degree of Doctor of Medicine

in the

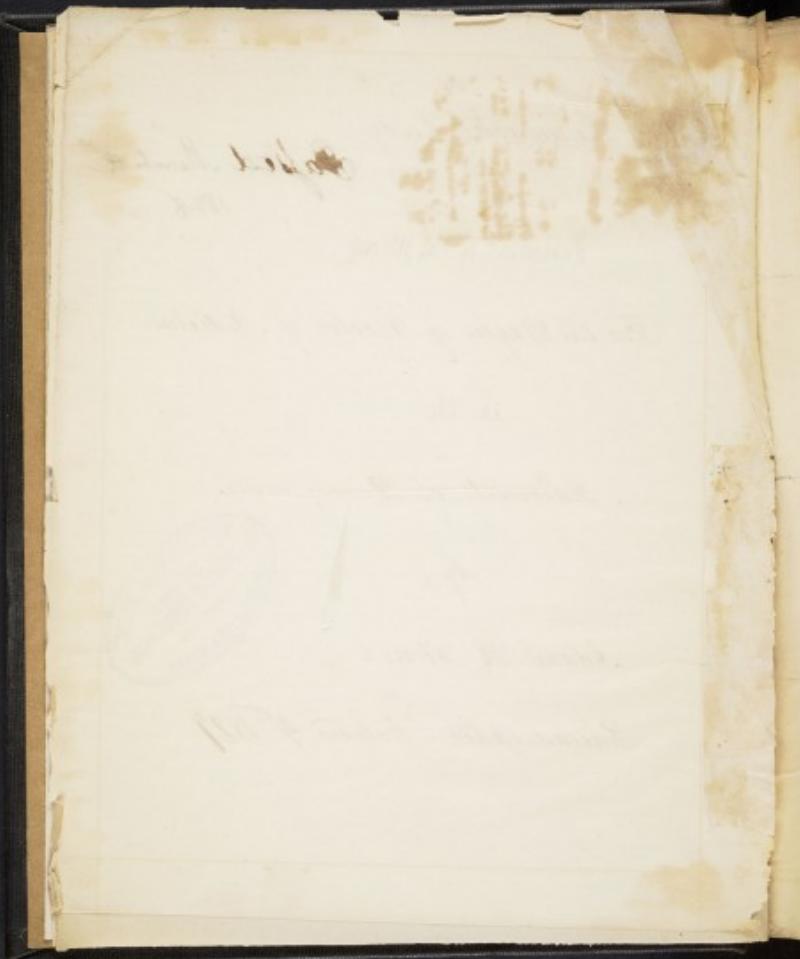
University of Pennsylvania

by

Adam R. Stouch

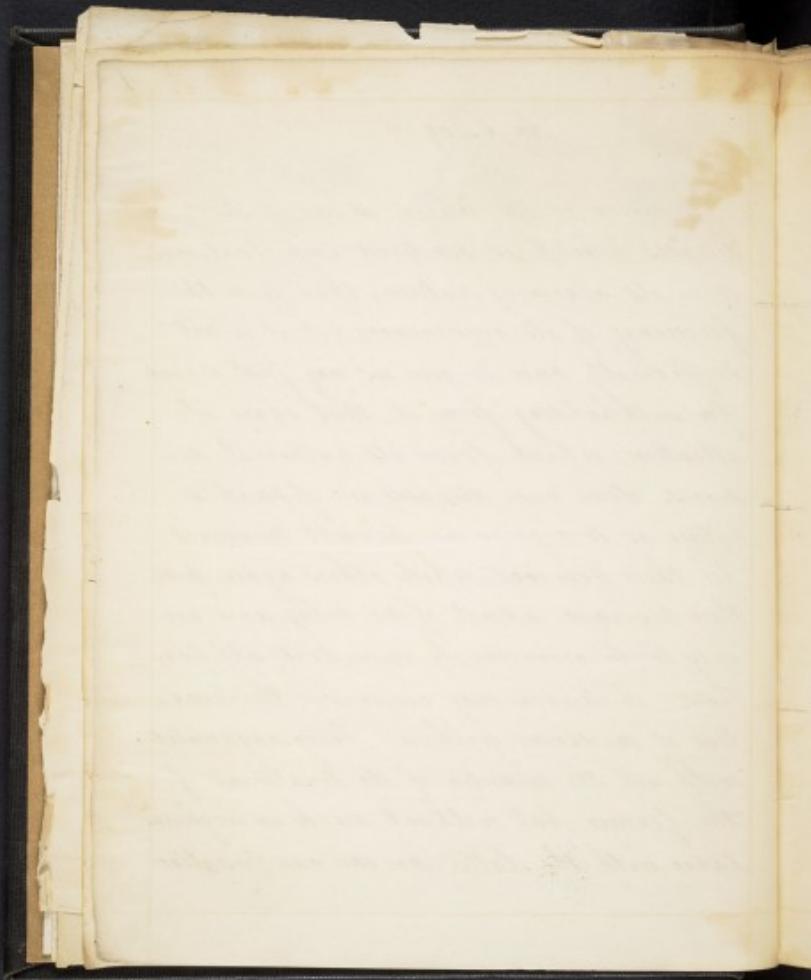
Philadelphia October 4<sup>th</sup> 1827



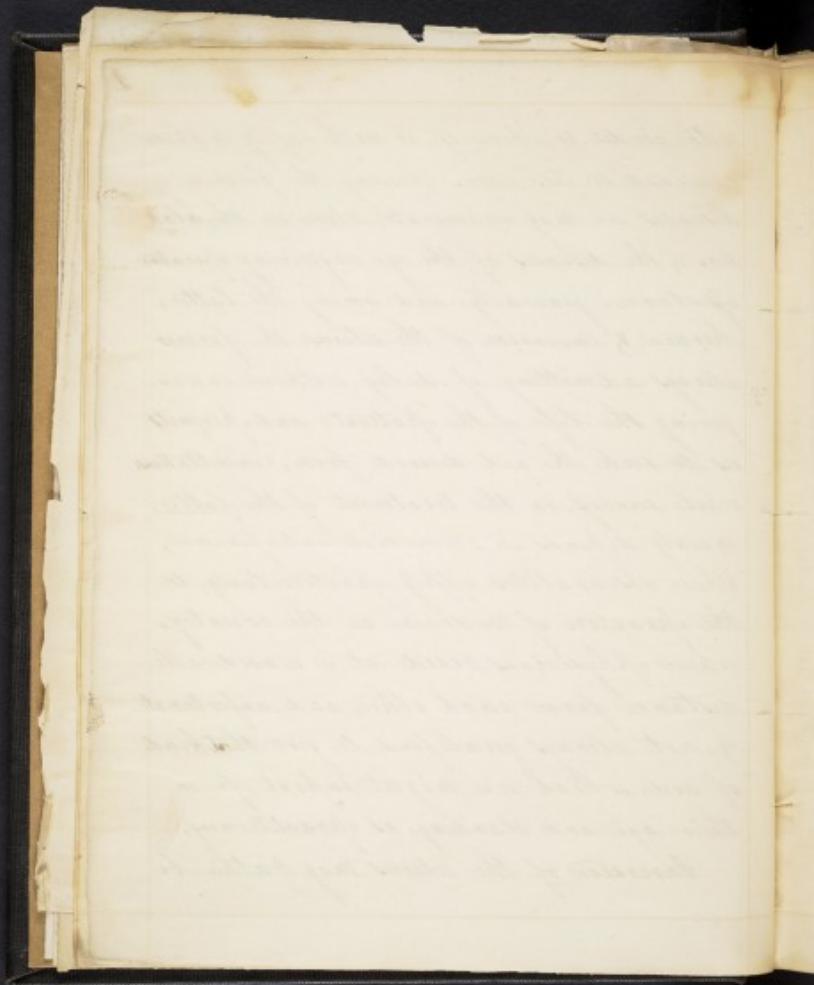


*An Essay**on*

Inversion of the uterus is one of those diseases which is rendered important, more from its alarming nature, than from the frequency of its occurrence; yet it is not sufficiently rare to give us any just ground for withholding from it, that share of attention, which, from its nature it deserves. Some rare diseases are of such a nature as to require no prompt measures for their removal; while others again, from their violence, admit of no delay, and are only to be overcome by immediate application. A person may commence the practice of medicine without being acquainted with all the minutiae of the treatment of the former, but without such an acquaintance with the latter no one can practice



with credit to himself, or with safety to those  
confided to his care. Among the former  
diseases we may enumerate, stone in the bladder,  
var. of the diseases of the eye requiring operative  
assistance, generally; and among the latter,  
Hernia, & inversion of the uterus; the former  
always admitting of delay, without endan-  
gering the life of the patient, and, permits  
us to seek the aid derived from consultation,  
while success, in the treatment of the latter,  
mainly depends on immediate interference.  
These observations apply, particularly, to  
the practice of medicine in the country,  
where physicians reside at a considerable  
distance from each other, and, unfortunat-  
ely, not always qualified to give that kind  
of aid, which we might expect from  
their age and standing, as practitioners.  
Inversion of the uterus may perhaps be



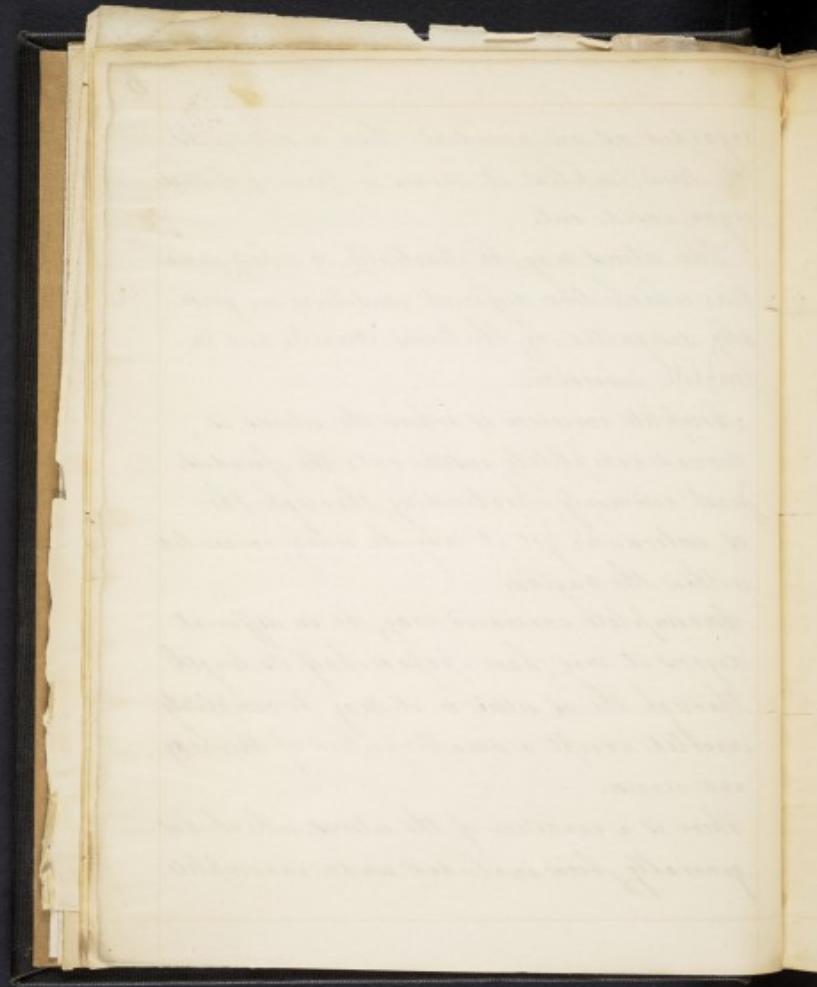
regarded as an accident than a disease. As the term implies, it means a turning of that organ inside out.

The uterus may be partially or wholly inverted; which two different conditions are generally designated by the terms complete and incomplete inversion.

Complete inversion is where the uterus is turned completely inside out; the fundus, most commonly protruding through the external os; yet it may be wholly concealed within the vagina.

Incomplete inversion may be in different degrees; it may have passed half its length through the os uteri, or, it may be completely inverted except a small portion of the body and cervix.

There is a condition of the uterus, which has generally been included under incomplete

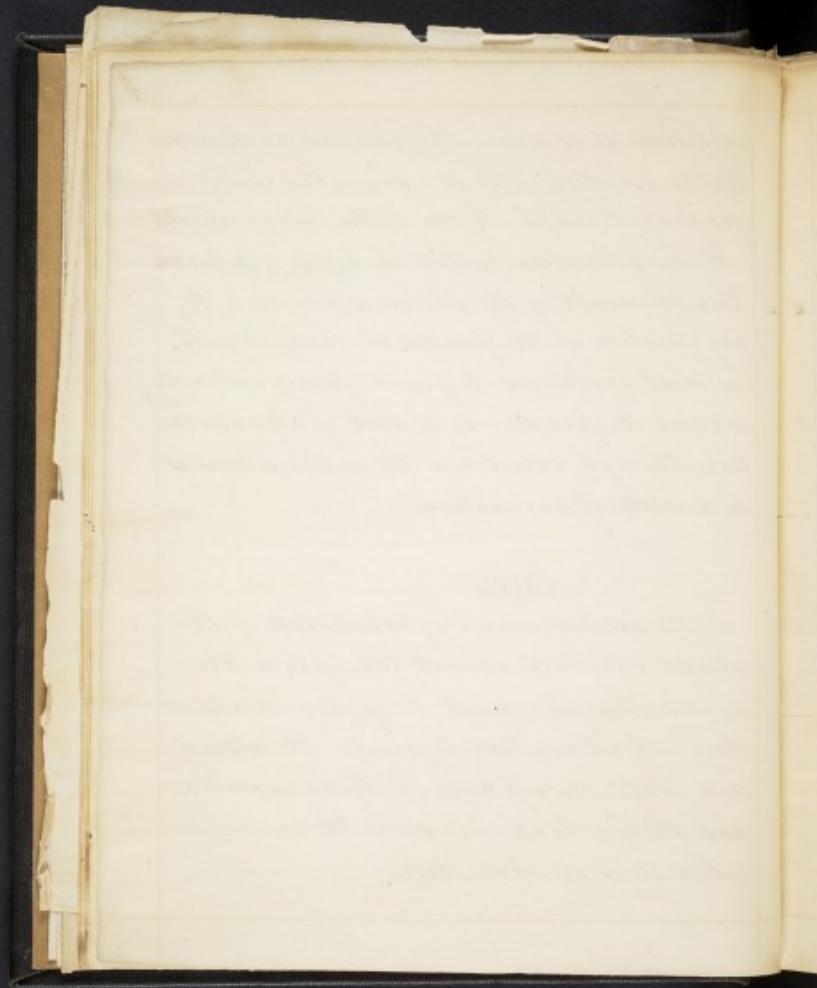


inversion; it is where the fundus falls down to the os uteri, but is prevented from passing through by the latter being contracted.

It has also been called the dipping of the fundus. When the mouth of the uterus is occupied by any portion of the fundus or body, it will, in most instances be found firmly contracting around it, producing a sort of strangulation; though sometimes the entire uterus is in a state of relaxation.

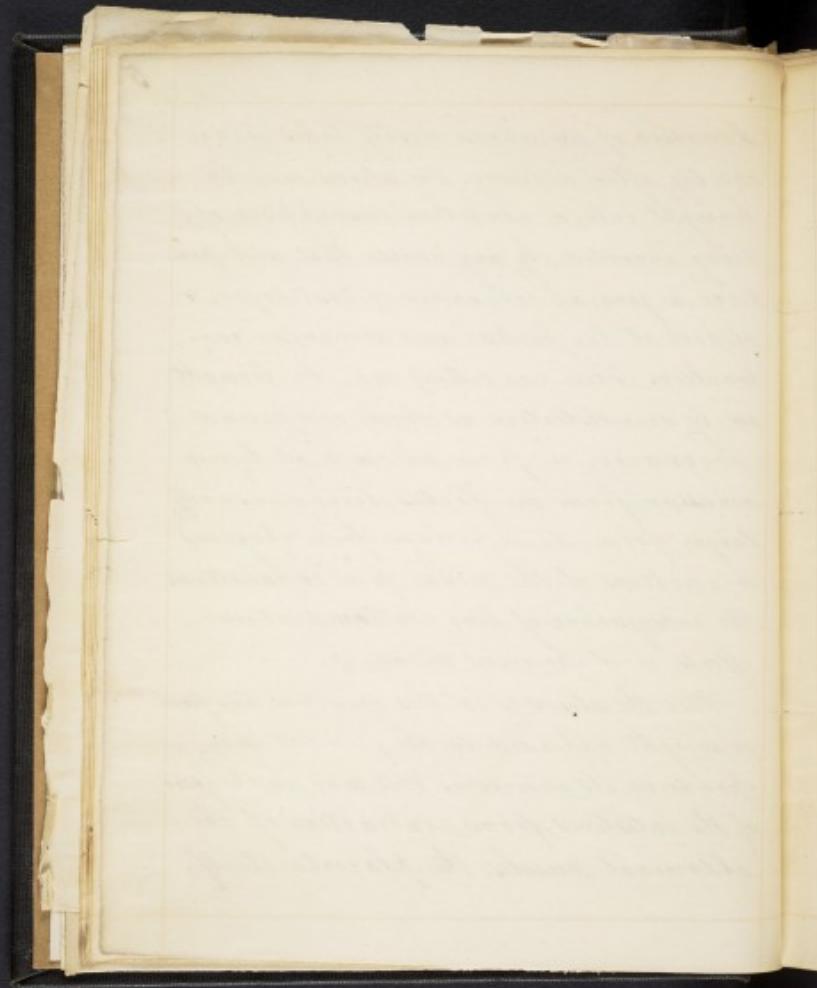
### Cause.

In the natural unpregnated state of the uterus inversion cannot take place. The causes, therefore must be of two kinds—those which combine to render the uterus in a state susceptible of being inverted, and those which produce the inversion when it is in that state.



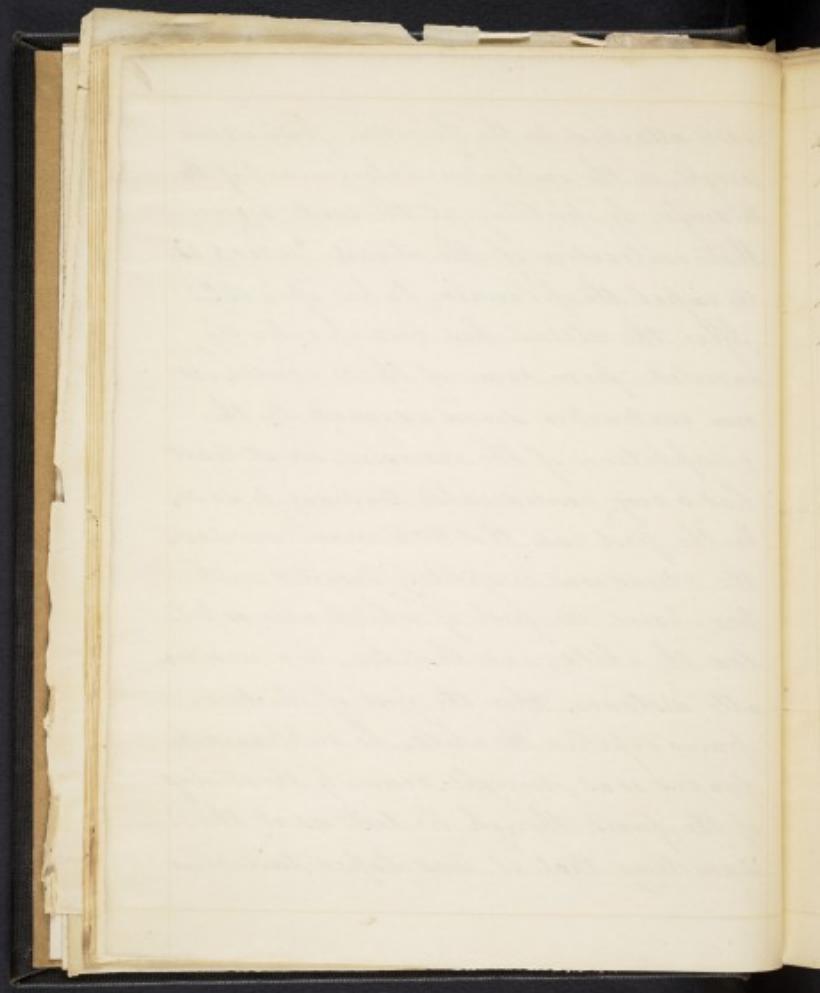
Inversion of the uterus mostly takes place shortly after delivery. The uterus may be brought into a condition susceptible of being inverted by any cause that will produce a general relaxation of that organ, or dispose it to partial and irregular contraction. These conditions may be brought on by overdistention as from compound pregnancy, or from an expt. of liquor amniæ; or from one foetus being unusually large; from haemorrhage; from passions or emotions of the mind; from exhaustion; the consequence of long continued uterine efforts, or of previous disease &c.

When the uterus is in this condition, any force or weight applied to the fundus may produce its inversion. This may be, pressure of the intestines from contraction of the abdominal muscles; the placenta, itself;



when attached to the fundus, from its own weight, or the improper interlacement of the midwife, by pulling at the cord before that contraction of the uterus, which is to expel the placenta, takes place! -

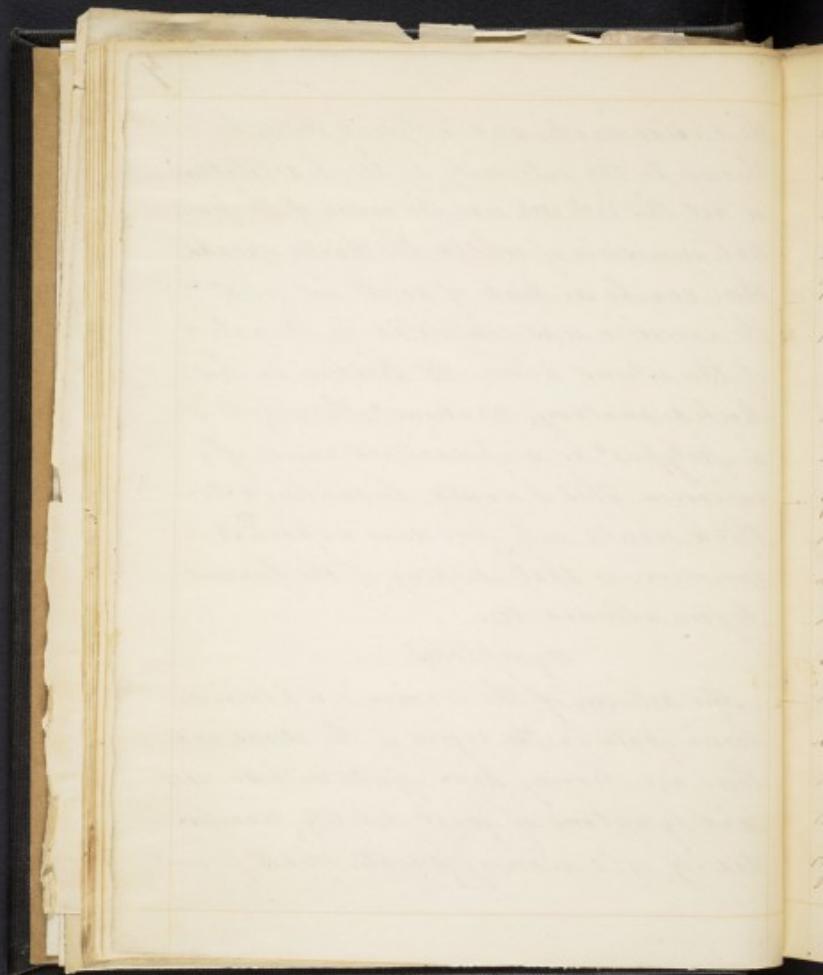
After the uterus has been partially inverted, from some of those causes, its own contraction seems adequate to the completion of the inversion; or at least has a very considerable tendency to do so. In the first case that Dr. Cenius ever saw, the uterus was completely inverted with two pains, the first of which also expelled the child, and that too, to a considerable distance. After the first of the two pains expels the child, he supposes the fundus is as brought down by the shortening of the fundus, though he tells us at the same time that it was loosed twice round.



the child's neck, and allowed it to be thrown to the extremity of the bed! Whether or not this short cord was the cause of the partial inversion of which the Doctor speaks, there can be no kind of doubt but what the inversion was completed by the action of the uterus alone. Dr. Baillie, in his Morbid anatomy, mentions the weight of a spouty post as a principal cause of inversion. This I would be inclined to think could only produce a partial inversion, or that slipping of the fundus before alluded to.

#### Symptoms

After delivery, if the woman complain of severe pain in the region of the uterus, and there are bearing down efforts, with nausea, and symptoms of great debility, manifested by cold clammy sweats, small frequent



pulse, and general languor; we have reason to suspect that inversion of the uterus has taken place. Combined with these symptoms there is often considerable haemorrhage, and not unfrequently very distressing nervous symptoms arise. Dr Cuvier thinks those nervous symptoms are probably owing to the new situation the viscera of the abdomen are forced to take, when deprived of the support of the uterus! These symptoms though not conclusive evidence that inversion has taken place, are sufficient to lead us to other modes of inquiry. If we place our hand on the hypogastric region, we will not feel that hard round body, which is always to be felt when the uterus is contracting properly; and if we examine the vagina we will find the vagina occupied by a hard twisting tumour, which is the



fundus of the uterus, and this may be enveloped by the placenta; or the whole may have passed through the os uterum, when there can be no difficulty, as regards the nature of the accident.

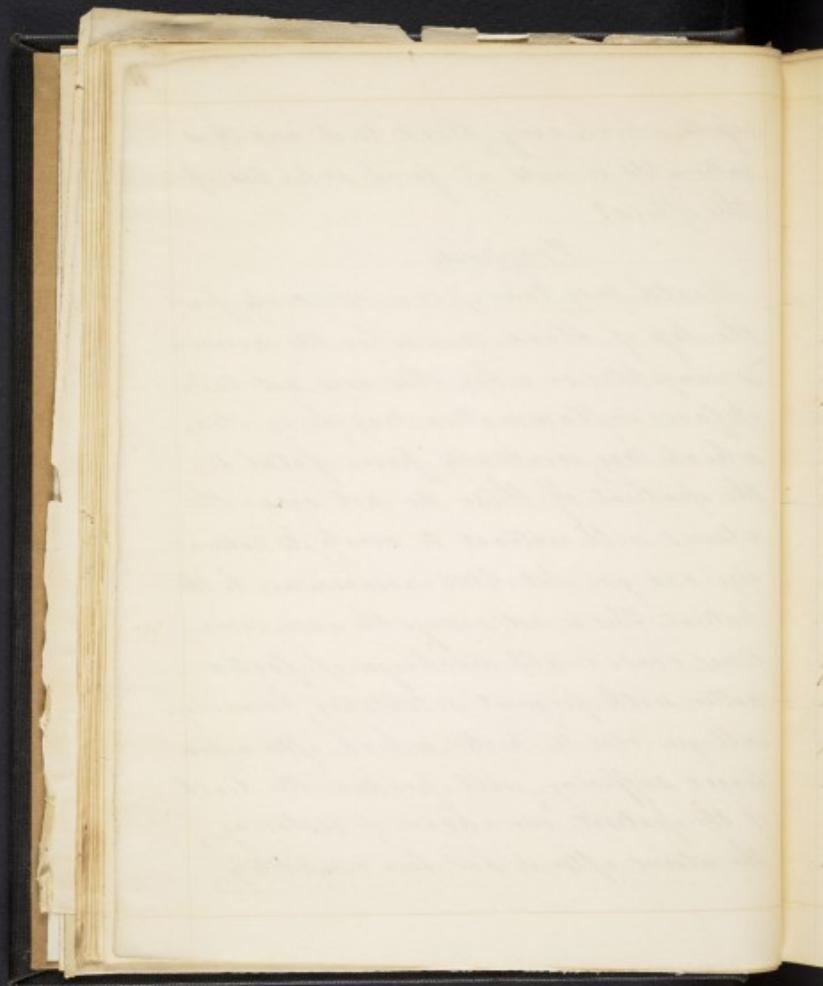
Inversion does not always occur immediately after the birth of the child. There is one case related by Dr. L' Hermitte, and adverted to by Mr. Burns, where it did not take place until the twelfth day, and it is not uncommon for several hours to elapse before the accident occurs. Incomplete inversion is commonly attended with more haemorrhage than complete. Dr. Decous explains this fact in the following manner: When the inversion is complete the uterus contracts to a certain extent; and, by this contraction the new internal surface of this organ is made to impinge upon the



veins which carry blood to it, and thus  
interrupts or cuts off fresh supplies of  
this fluid?

### Prognosis

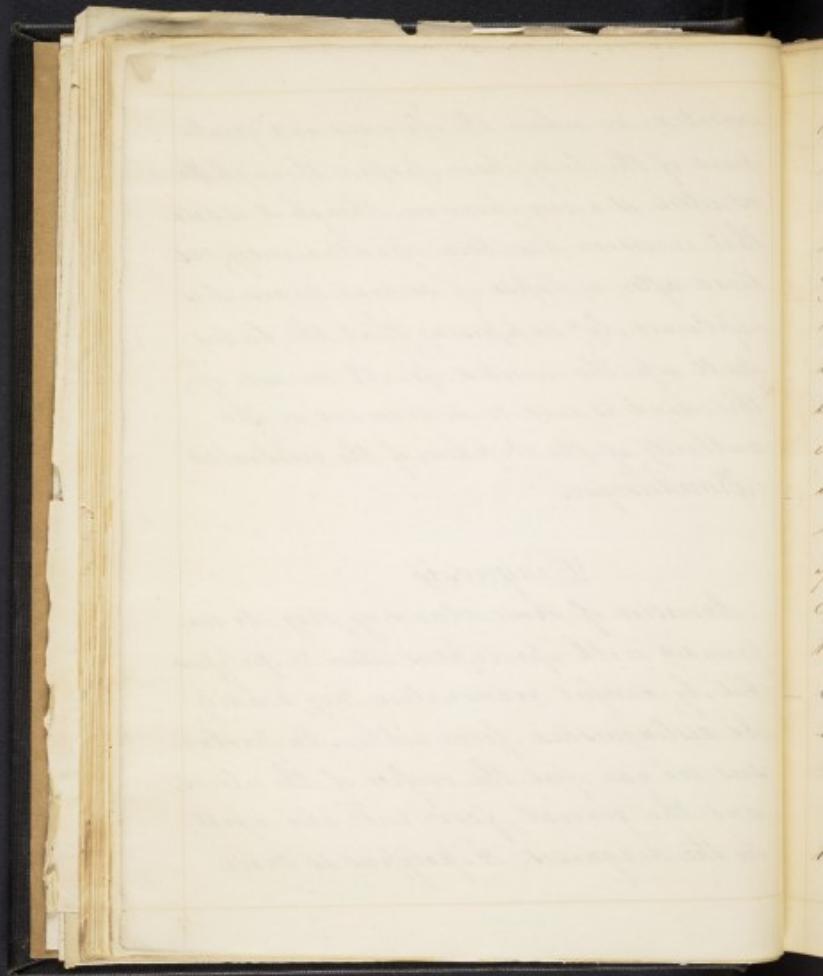
Death may take place suddenly from  
the loss of blood, even when the involution  
is complete; or when this does not take  
place, inflammation may be excited,  
which may eventually prove fatal to  
the patient. If these do not occur the  
uterus will contract to nearly its natural  
size and give but little inconvenience to the  
patient. This is not always the case: some-  
times considerable discharge of foetid  
matter, with frequent debilitating haemorrhage  
will give rise to hectic, which, after a few  
longer suffering, will produce the death  
of the patient. Our chance of restoring  
the uterus after it has been completely



inverted, or where the fundus and greater part of the body, have passed through the uterine, is a very poor one, though it is said that inversion has been spontaneously restored after a lapse of several years; it is explained by supposing that the tubes pull up the inverted part. In one case of this kind is said to be recorded on the authority of the <sup>French</sup> physician of the celebrated Baudeloque.

### Diagnosis

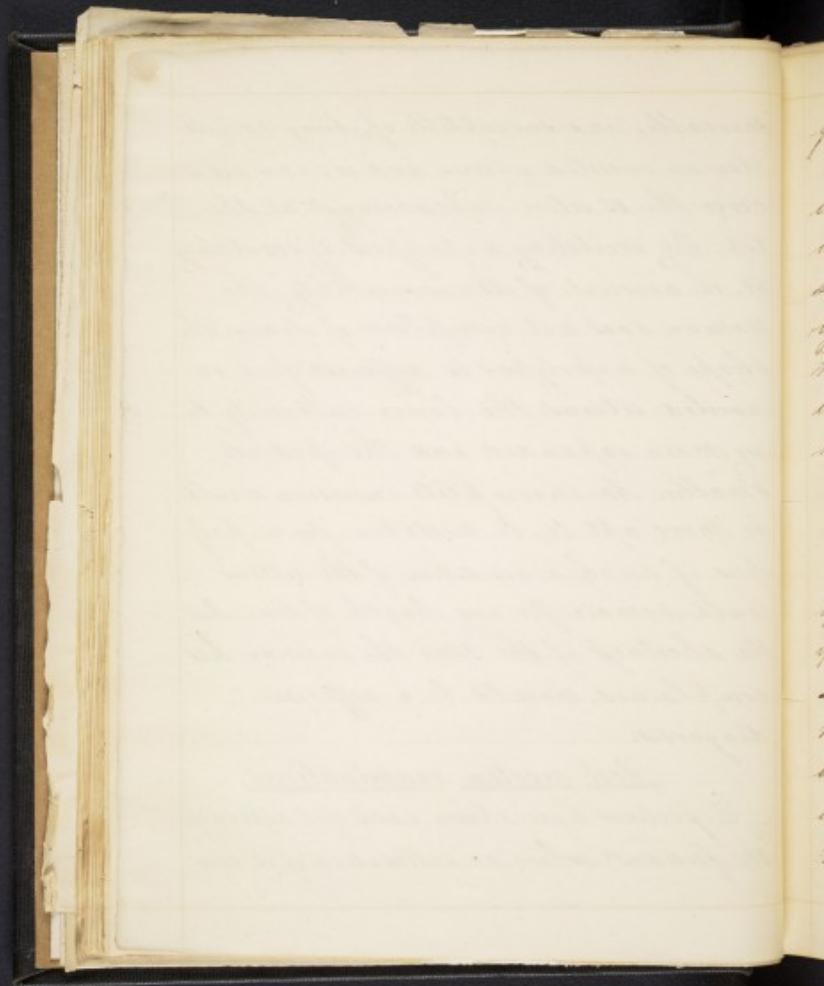
Inversion of some standing may be confounded with prolapsus uteri or polypus but, by careful examination may readily be distinguished from either. In prolapsus we can feel the orifice of the uterus, and the general form will also assist in the diagnosis. A polypus is more



moreable, and susceptible of being rolled than an inverted uterus, and we can discover the os uteri embracing it at the top. By irritating a polypus by scratching &c., on account of its insensibility, the woman does not complain of pain. The shape of a polypus is different from an inverted uterus; the lower extremity being more expanded and the pedicle smaller. An incomplete inversion would be more apt to be mistaken for a polypus, if such a condition of the uterus could remain for any length of time; but the shortness of the time the woman has complained, would be a sufficient diagnosis.

Post mortem examinations

Disections have shown cases of "slipping of the fundus" where no intimation of it was

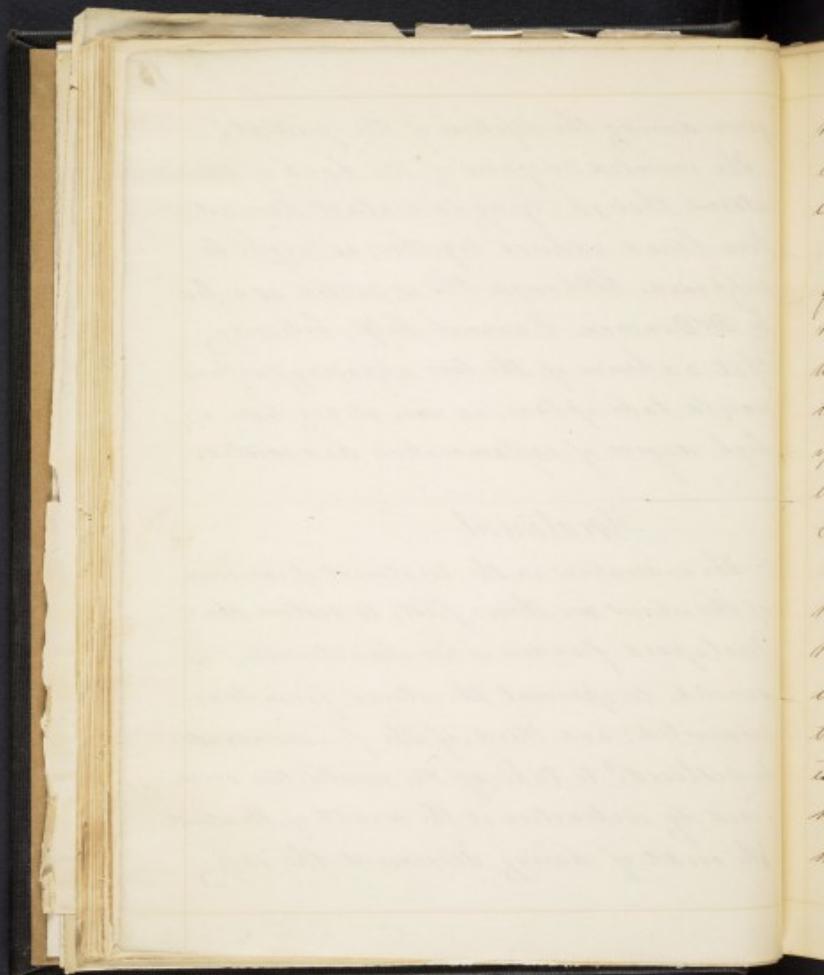


given during the lifetime of the patient.

The inverted surfaces of the back of the uterus, though lying in contact have not been found adhered together, as might be supposed. Although this is stated as a fact by Dr Denman, I cannot help believing that adhesion of the two opposing surfaces would take place, in case at any time a high degree of inflammation had existed.

### Treatment

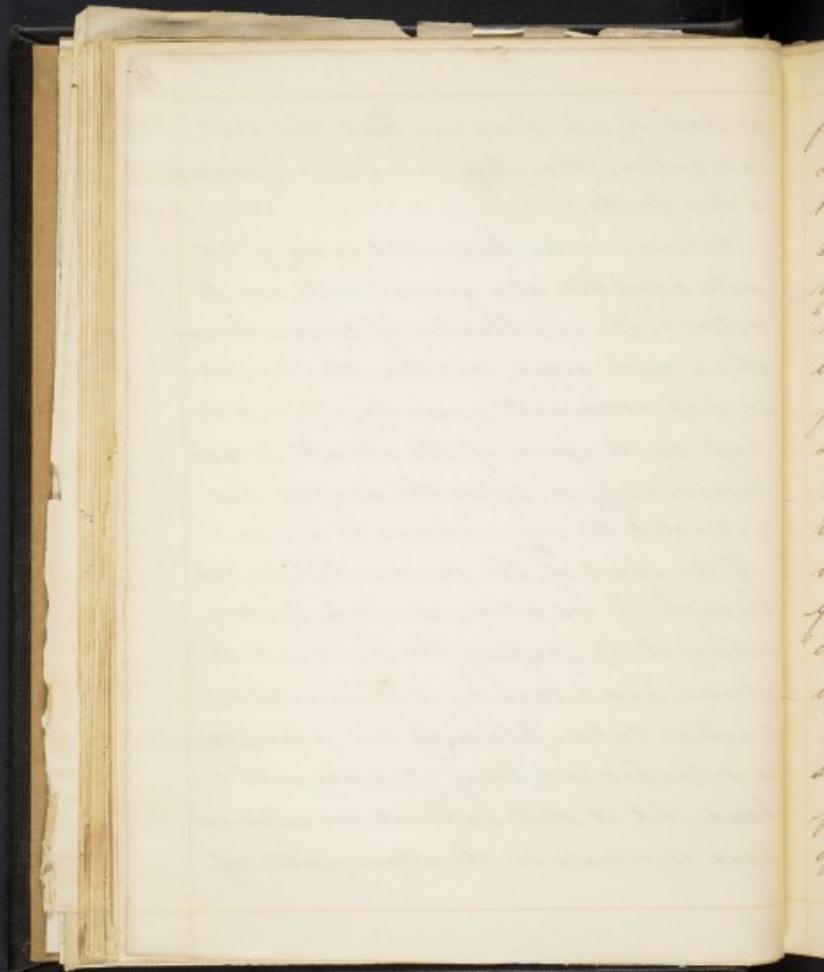
The indications in the treatment of inversion of the uterus are three: first, to restore the prolapsed fundus when practicable; second, to prevent the uterus from being re-inverted; and third, if the fundus cannot be restored, to take off the constriction occasioned by contraction of the mouth of the uterus. The credit of having discovered the only



method by which we can meet this last indication, (though a dreadful resource,) is due to Dr. Seccoy.

Inversion when discovered early if not quite complete, at a general rule, can be restored. The combination of circumstances which must occur, to allow the fundus to pass down, will generally allow it to pass back again, if the attempt be made immediately, or before the os uteri has contracted to any considerable degree.

If no part of the fundus has passed through the os uteri, we immediately restore it by passing the hand into the uterus, and retaining it there until contraction takes place. If the placenta is detached we bring it away with the hand; but if still adherent, we allow our hand to remain in the uterus until suf-

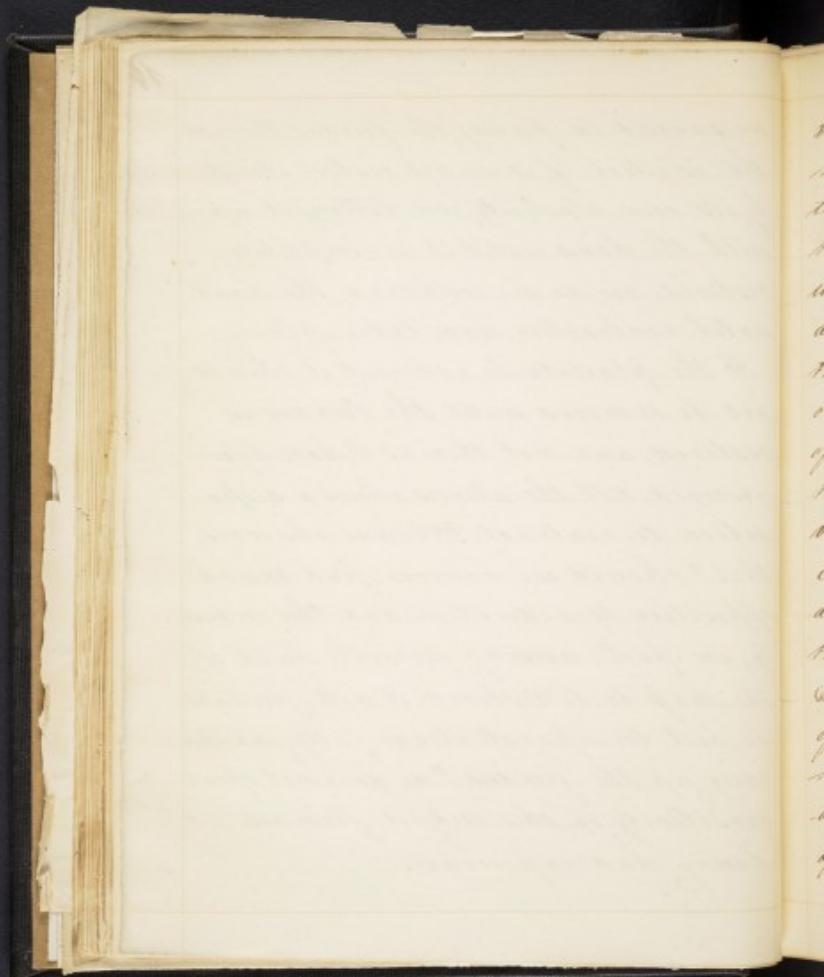


fequent contraction has taken place to secure the woman against haemorrhage we then gently detach it and bring it away. In a case of this kind, where we cannot by gentle means succeed in forcing the hand through the os uteri, so as to raise up the prolapsed fundus, we will be justified in using a stick covered with some soft substance, for that purpose. If the uterus have escaped from the vagina, it, in the first place, must be restored within it; if it have not, we grasp the tumour in the hand, and endeavour to restore it by pushing it upwards within the mouth of the uterus. We can operate with more effect by grasping the most prominent part of the fundus in the direction of the axis of the os uteri, at the same time. After

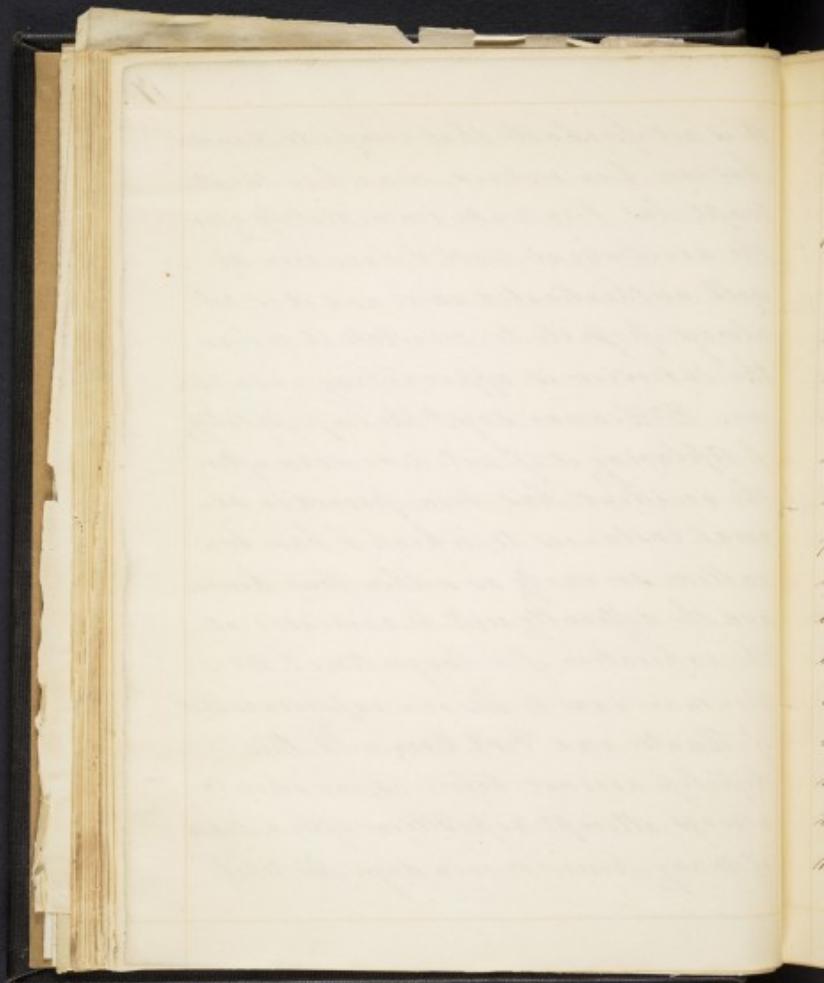


we succeed in forcing the fundus through  
the os uteri, if it do not restore itself  
by its own elasticity we follow it up  
with the hand until it is completely  
restored; nor do we withdraw the hand  
until contraction have taken place.

If the placenta be adherent it should  
not be removed until the fundus is  
restored, and not then as I have before  
observed, till the uterus shows a dispo-  
sition to contract. Dr. Wood observes,  
that "should we however find much  
opposition to reduction, and this consist-  
ing in part, arising from the bulk of  
the mass to be restored, it will (perhaps)  
be best to separate it carefully, and then  
carry up the fundus." he does not speak  
positively on this subject, from not  
having had experience.

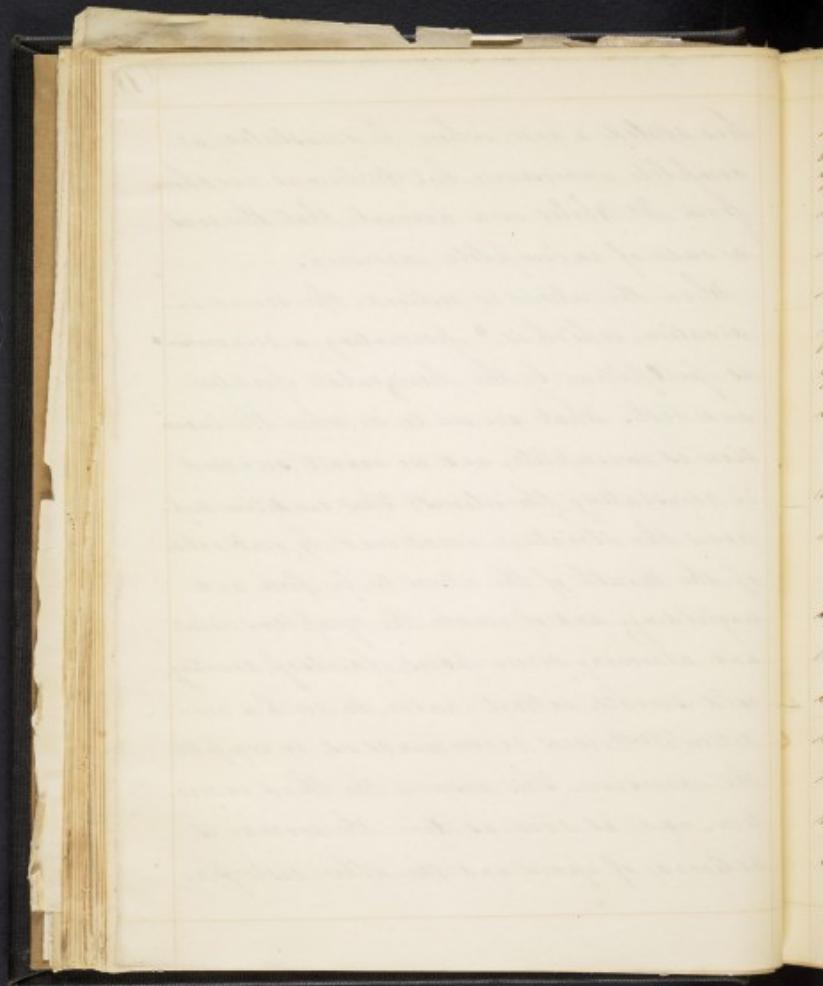


It is not probable that complete inversion  
has ever been restored, even where the at-  
tempt has been made immediately after  
the accident; at least I have seen no  
well authenticated case; and it is not  
always possible to reinstate it where  
the inversion is approaching a complete  
one. Dr Denman says, "the impossibility  
of replacing it if not done soon after  
the accident has been proved in se-  
veral instances to which I have been  
called, so early as within four hours,  
and the difficulty will be increased at  
the expiration of a longer time." Dr  
Denman adds to his own experience that  
of Hunter and Ford. Even with this  
hopeless account before us, we should  
always attempt reposition after a lapse  
of many hours, or even days. Mr White



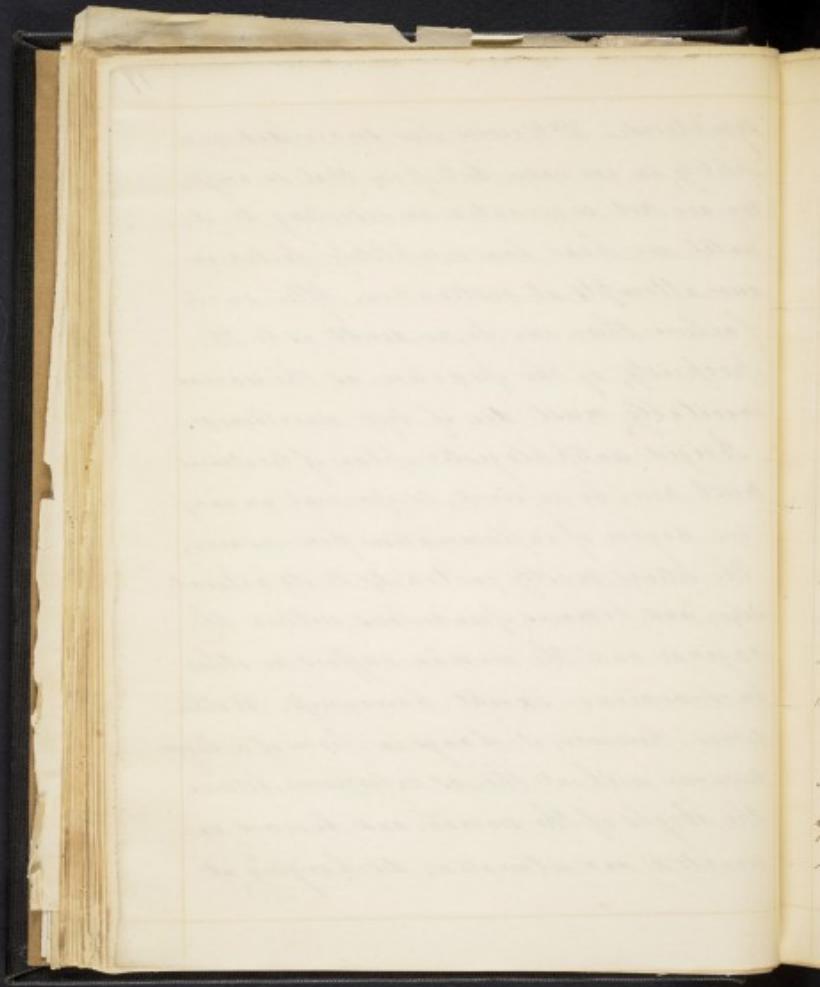
has stated a case where he reinstated a complete inversion; but Dr. Devoes has shown from Mr. White's own account, that this was a case of incomplete inversion.

When the uterus is restored, the second indication, which it is preventing, a reinversion is fullfilled, by the horizontal position and rest. What are we to do when the inversion is incomplete, and we cannot succeed in reinstating the uterus? This condition imposes the stricture occasioned by contraction of the mouth of the uterus to be firm and unyielding, and of course the symptoms violent and alarming, severe pain, fainting, vomiting, cold sweats, enlarged pulse. In such a condition Dr. Devoes recommends us, to complete the inversion. This answers the third indication, and as soon as done, the woman is relieved of pain and the other distressing



symptoms.—Dr. Coccoe has succeeded completely in one case; but from that success we are not warranted in resorting to it, until we have ~~seen~~ <sup>been</sup> completely failed in our attempts at restoration. After such failure there can be no doubt as to the propriety of the practice, as the woman inevitably must die if left untreated.

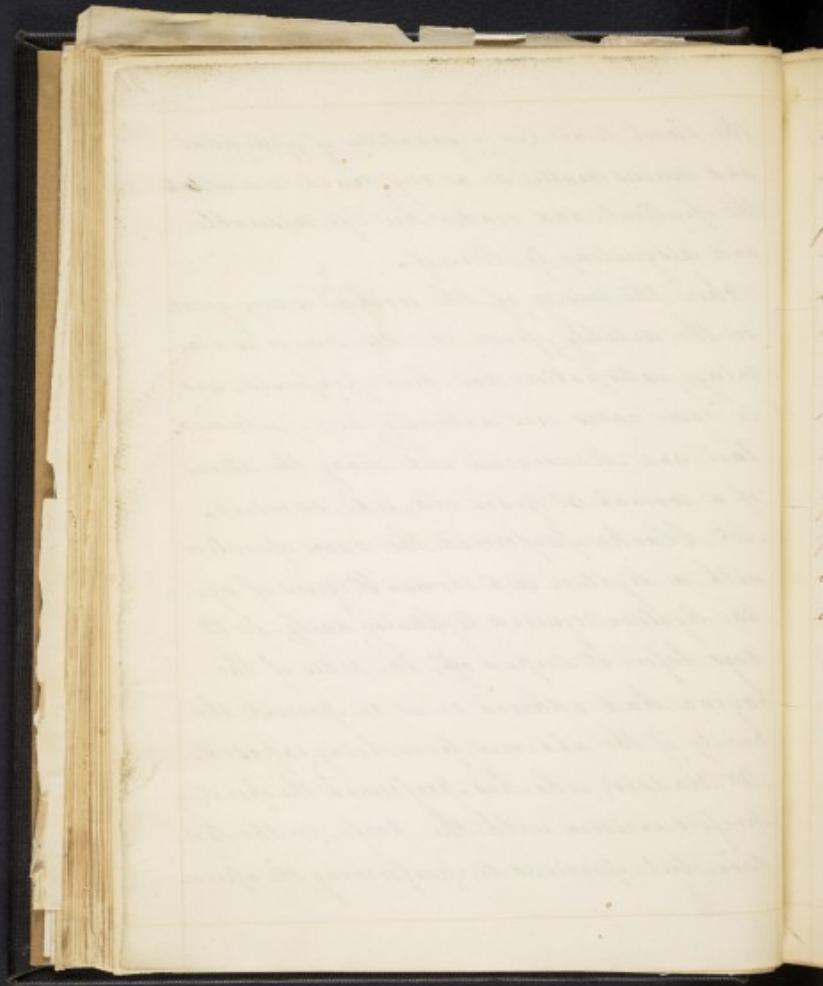
A rigid antiphlogistic plan of treatment must now be enjoined, to prevent an early severe degree of inflammation from ensuing; the uterus mostly contracts to its natural size, and remains pendulous within the vaginal; and the woman suffers no other inconvenience except barrenness. At other times, however, it hangs in form of a large tumour without the os externum, between the thighs of the woman, and becomes excoriated and ulcerated; discharging at



the same time large quantities of sanguineous  
and mucous matter so as very much to debilitate  
the patient, and render her life miserable  
and disgusting to herself.

When the misery of the woman is very great,  
or the debility from the discharge is alarming,  
eversion has been proposed, and  
in some cases has actually been performed.  
Farr and Maurecaud cut away the uterus  
of a woman 30 years old, who survived.

Mr. Clarke performed the same operation  
with a ligature on a woman 60 years of age.  
The ligature required tightening daily, for 12  
days before it dropped off. The sides of the  
vagina had adhered so as to prevent the  
cavity of the abdomen from being exposed.  
Mr. Windsor, who has performed the operation  
prefers excision with the knife, to the liga-  
ture; but, previous to performing the opera-



tion, recommends the application of a ligature,  
to secure the adhesion of the sides of the va-  
gina. This operation should never be performed,  
except in those cases, where death necessarily  
would soon be the consequence of, the increase-  
ing debility of, the patient.—

In the preceding pages I have endeavoured  
to give a correct account of one of the most  
terrible accidents encountered in the practice  
of Midwifery; how far I have succeeded is  
for other judges to determine. For the manner  
in which it is done, I, at least, claim the in-  
dulgence due to one unaccustomed to writing.

Adam R. Stroh  